



Recombinant Protein Technical Manual

Recombinant Mouse SLAMF3/CD229 Protein (His Tag)

RPE5190

Product Data:

Product SKU: RPE5190

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: NP_032560.2

Protein Information:

Molecular Mass: 47 kDa

AP Molecular Mass: 65-75 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

Reconstitution: Please refer to it for detailed information.

Application:

Synonyms: T-lymphocyte surface antigen Ly-9; Cell surface molecule Ly-9; Lymphocyte antigen 9; SLAM family member 3; SLAMF3; Signaling lymphocytic activation molecule 3; CD229; Ly9; Ly-9; AI893573; Lgp100; T100

Immunogen Information:

Sequence: Lys48-Phe454

Background:

CD229(SLAMF3) is a type I transmembrane glycoprotein in the SLAM subgroup of the CD2 family. Mature mouse CD229 consists of a 406 aa extracellular domain (ECD) with two Ig-like V-set and two Ig-like truncated C2-set domains, a 21 aa transmembrane segment, and a 180 aa cytoplasmic domain with two immunoreceptor tyrosinebased switch motifs ITSMs. Within the first two Ig-like domains that are common to all SLAM proteins, mouse CD229 shares 22%-36% aa sequence identity with mouse 2B4, BLAME, CD2F10, CD84, CRACC, NTBA, and SLAM. CD229 is expressed on T, B, and NK cells, thymocytes and monocytes. Homophilic binding between CD229 molecules is mediated by the N-terminal Ig-like domain. Human and mouse CD229 exhibit crossspecies binding. Antigen stimulation of lymphocytes induces CD229 clustering to sites of T cell-B cell contact. Antibody ligation of CD229 can inhibit T cell activation, but CD229 knockout mice show impaired T cell immune responses, suggesting a potential role for CD229 in T cell activation or costimulation.